

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/50927

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01V1/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01V

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 428 581 A (DOISY YVES ET AL) 27 June 1995 (1995-06-27) column 1, line 9 - line 20 column 2, line 53 - line 59; figure 2	1-4, 15-18, 24, 38, 39
A	COURT I N: "Applications of acoustics to source-array and streamer tow-point positioning" GEOPHYSICS, SOCIETY OF EXPLORATION GEOPHYSICISTS. TULSA, US, vol. 56, no. 4, 1 April 1991 (1991-04-01), pages 558-564, XP002268338 ISSN: 0016-8033 page 559; figures 1,2 page 561, left-hand column -page 563, left-hand column --- -/--	1-42

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

7 April 2004

Date of mailing of the international search report

07/05/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DRAGOSET W H: "MARINE VIBRATORS AND THE DOPPLER EFFECT" GEOPHYSICS, TULSA, OK, US, vol. 53, no. 11, November 1998 (1998-11), pages 1388-1398, XP000957937 the whole document -----	1-42
A	GB 2 339 906 A (MOBIL OIL CORP) 9 February 2000 (2000-02-09) page 5, line 15 -page 6, line 2 page 7, column 24 -column 26 figures 1-3 claim 1 -----	1-42

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5428581	A	27-06-1995	FR 2675587 A1	23-10-1992
			AU 658622 B2	27-04-1995
			AU 1648192 A	17-11-1992
			CA 2108449 A1	17-10-1992
			DE 69213726 D1	17-10-1996
			DE 69213726 T2	23-01-1997
			EP 0580695 A1	02-02-1994
			WO 9218878 A1	29-10-1992
GB 2339906	A	09-02-2000	US 6049507 A	11-04-2000
			CA 2278131 A1	22-01-2000
			CN 1246623 A	08-03-2000
			DE 19934520 A1	16-03-2000
			FR 2782389 A1	18-02-2000
			ID 23236 A	30-03-2000
			NO 993572 A	24-01-2000
			SG 74154 A1	18-07-2000